



INSTALLATION INSTRUCTIONS

SEMI-HIDDEN KIT

Part Number: 106413

Application: Subaru Forester

GENERAL SAFETY PRECAUTIONS

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. WARNING and CAUTION are signal words that identify the level of hazard. These signal words mean:

▲WARNING signals a hazard that could cause serious injury or death, if you do not follow recommendations. **▲CAUTION** signals a hazard that may cause minor to moderate injury, if you do not follow recommendations.

This guide uses **NOTICE** to call attention to important mechanical information, and Note: to emphasize general information worthy of special attention.

▲ WARNING

IMPACT AND MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or death

- **Always** Know Your Winch. Take time to fully read the Instructions and/or Operations Guide, and/or Basic Guide to Winching Techniques, in order to understand your winch and its operations.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Never** use a jack to support the vehicle.
- **Always** use jack stands in pairs to support the vehicle.
- **Always** use jacks or jack stands only on a hard, stable, and level surface.
- **Never** exceed the rated capacity of a jack or jack stands.
- **Always** verify that the parking brake is set, the transmission is in park (automatic) or reverse (manual) and the rear wheels are blocked before working on vehicle.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Always** insure components will remain secure during installation and operation.
- **Always** tighten all nuts and bolts securely, per the installation and operation.
- **Always** perform regular inspections and maintenance on the winch, winch mount and related hardware.
- **Always** replace all worn or damaged parts before operating.
- **Never** operate this WARN product with damaged or missing parts.
- **Always** use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when / if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.
- **Always** use extreme caution when cutting and trimming during fitting.
- **Always** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- **Always** remove jewelry and wear eye protection.
- **Never** lean over battery while making connections.
- **Never** route electrical cables across any sharp edge, through or near moving parts, near parts that become hot.

Read installation and operating instructions thoroughly.

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Clackamas, OR USA 97015-8903, 1-503-722-1200, FAX: 1-503-722-3000
Customer Service: 1-800-543-9276
Dealer Locator Service: 1-800-910-1122
International Sales/Customer Service: 1-503-722-3008
International Fax: 1-503-722-3005

⚠ CAUTION

MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury

- Part edges may be sharp!
- Always use proper posture / lifting technique or get lifting assistance while handling and installing product.

Read installation and operating instructions thoroughly.

NOTICE

EQUIPMENT DAMAGE

- **Never** tow vehicle by attaching a tow bar to the eyelets on the bumper.
- Do not attach tow bars directly to the bumper. Damage to bumper may occur. WARN bumpers are not designed to be used for flat towing. Consult with the manufacturer of your tow bar system for the proper vehicle tow bar brackets..

Read installation and operating instructions thoroughly.

NOTES

- **Installation is shown with Axon 55-S winch.**
- **Installation will vary slightly with steel rope due to fairlead differences**
- **Light Bar can be installed in place of winch using slots on winch surface or on internal gussets.**

BEFORE YOU BEGIN



This product may interfere with driver assist systems such as adaptive cruise control and parking assist systems that have sensors or cameras installed in the bumpers or front grill area. If your vehicle is equipped with any of these systems or features, consult your vehicle owner's manual before installing this product. These systems may need to be disabled as a result of installing this product.

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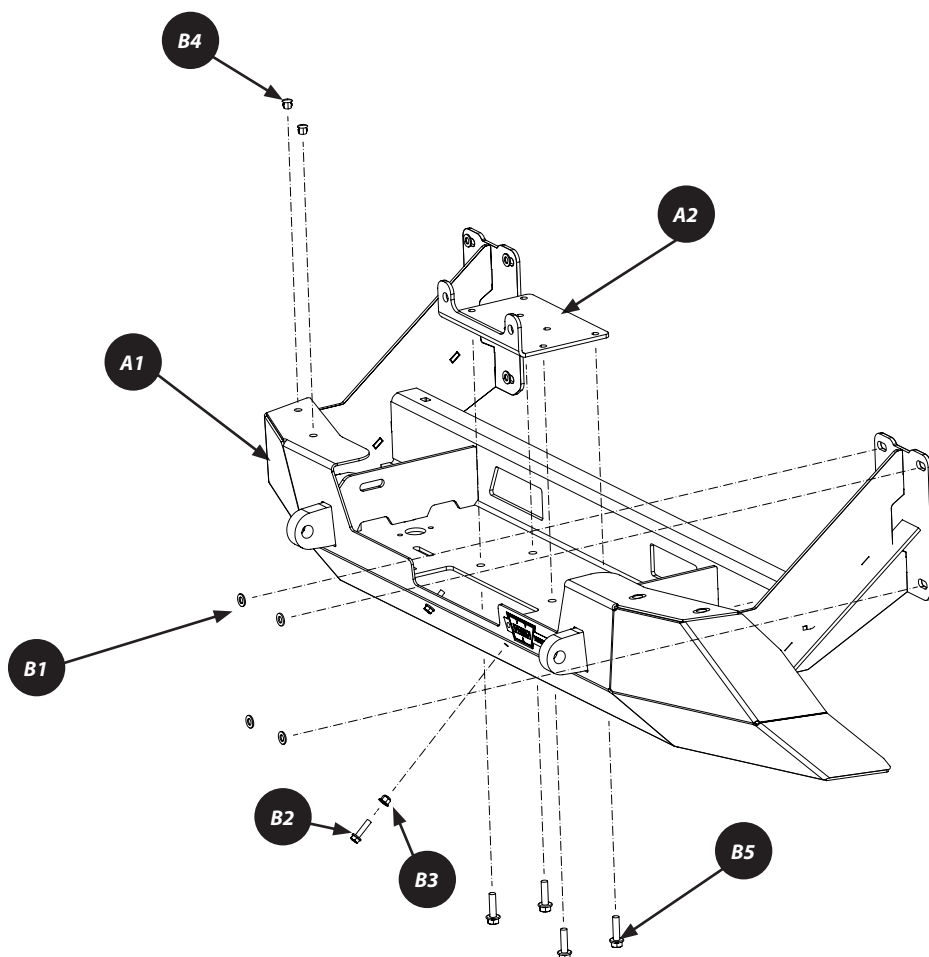
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TOOLS REQUIRED

- | | |
|---------------------------|--|
| • 8mm Hex Key | • Philips Head Screwdriver |
| • 17mm Wrench | • Small Flat Head Screwdriver or body panel tool |
| • 10mm Socket and Ratchet | • Ring Terminal |
| • 12mm , 13mm Socket | • Cutting tool |
| • Socket Extension | |

PARTS LIST

Item	PN	Description	Qty.	Item	PN	Description	Qty.
A1	106414	SEMI HIDDEN MOUNT	1	B1	82156	M8 FLAT WASHER	8
A2	28885	FAIRLEAD MOUNTING PLATE	1	B2	64108	M6-1.0 X 25-HEX HEAD-FLANGE BOLT	2
				B3	83125	M6 X 1.0 FLANGED NUT	2
				B4	100772	3/8_LOCKING BLACK PLASTIC PLUG	4
				B5	64110	M8-1.25 X 30-HEX HEAD FLANGE BOLT	4



TORQUE SPECIFICATIONS

Please use the recommended torque specifications when assembling this product unless otherwise specified in the instructions.

FASTENER SIZE	FASTENER TORQUE		FASTENER SIZE	FASTENER TORQUE	
	lb-ft	(N.m)		lb-ft	(N.m)
1/4"	8	(11)	M4	(2)	3
5/16"	17	(23)	M5	(4.5)	6
3/8"	30	(40)	M6	(7.5)	10
7/16"	48	(66)	M8	(18)	25
1/2"	74	(100)	M10	(37)	50
9/16"	106	(144)			
5/8"	148	(200)			
3/4"	269	(364)			

INSTALLATION INSTRUCTIONS

1. Mount the fairlead to the fairlead mounting plate (A2) using the hardware from the winch kit.

NOTE: Depending on your winch kit, your fairlead may look different than image shows.



Figure 1

2. Install terminal boots to ends of the red and black power cables. **NOTE:** For easier install, you may want to trim a very small amount off the cable side of the boot (narrow opening).

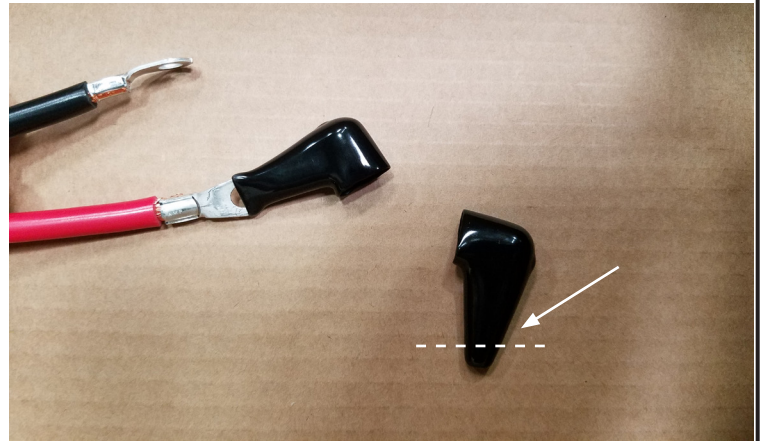


Figure 2

3. Using a 10mm socket, attach the booted end of the red and black power cable to the winch power posts. **NOTE:** red cable to the positive (+) and black cable to the negative (-) post.



Figure 3

4. Locate the stripped red wire on the remote socket harness from your winch kit.
5. Crimp a ring terminal onto the red wire and attach to the winch positive (+) terminal.

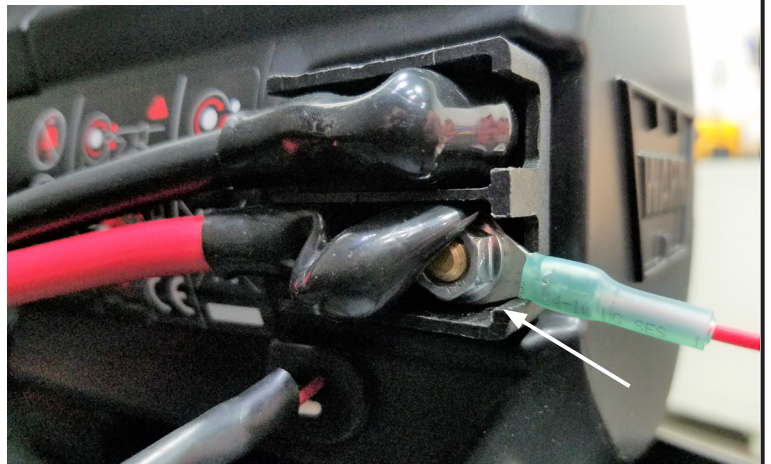
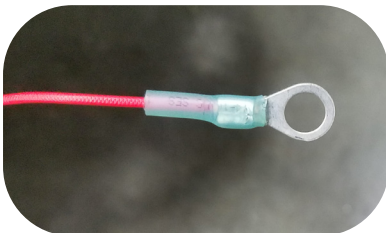


Figure 4

INSTALLATION INSTRUCTIONS

6. Place fairlead plate assembly on top of the semi-hidden mount, aligning mounting holes.
7. Place winch on top of plate (aligning holes) and secure using the four M8 flange head bolts (B5) from [this kit](#).
8. With winch in freespool (disengage clutch), feed the winch rope through the fairlead opening.



Figure 5

9. Route the winch switch harness connector out the cut out in the rear of the weldment and move the red and black cables up and out of the way, as shown. Figure 6.
10. Determine the mounting location for the remote socket (left or right of the winch mounting locations available).

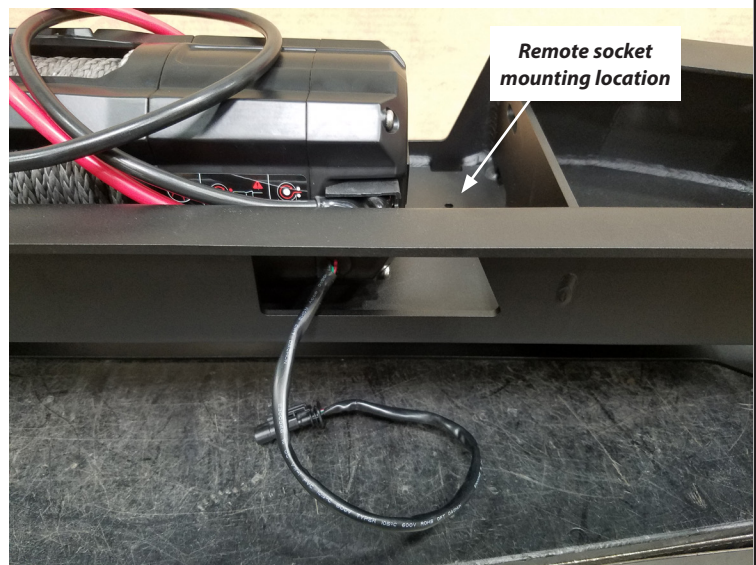


Figure 6

11. From underneath the weldment, feed the remote socket through the largest drilled hole.
12. Place the rubber remote socket cover over the remote socket and secure with the two screws and washers from your winch kit.

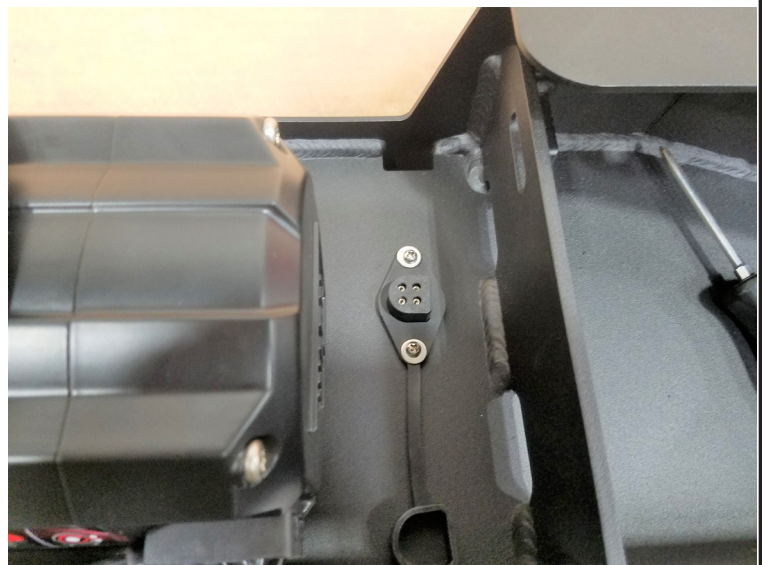


Figure 7

INSTALLATION INSTRUCTIONS

13. Using a 10mm socket, remove the four clips and two screws along the top of the grille.

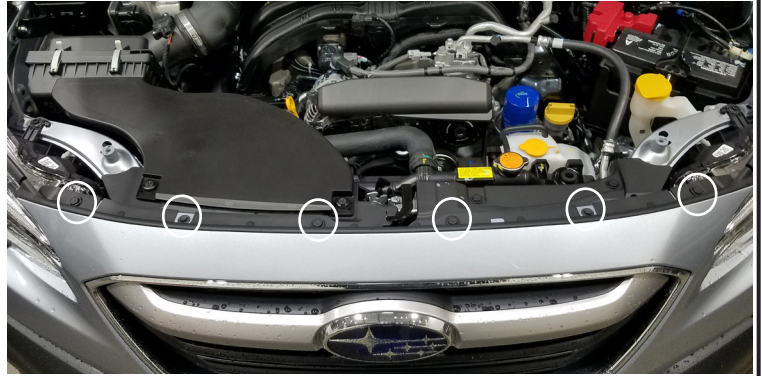


Figure 8

14. In each wheel well remove the 3 plastic push pins by depressing the center until it clicks, and then lifting the entire pin out.



Figure 9

15. Along the bottom edge of the bumper, remove the ten plastic push clips.

16. If equipped, disconnect the connectors of the left and right fog light assembly. **NOTE: It may be easiest to reach them once the bumper plastic has been unclipped, but not yet removed from the vehicle.**



Figure 10

17. Carefully, remove the bumper cover by pulling firmly out and up, starting at the wheel well and working around the headlight and front of vehicle.

Once bumper cover is fully released from vehicle, set aside on a protective stable surface.



Figure 11

INSTALLATION INSTRUCTIONS

18. Unclip the temperature sensor by squeezing the tabs on the back.
19. Unplug the shutter motor on the driver side.
20. Remove the three bolts securing the grille shutter with a 10mm socket.
21. Unsnap the two clips at the lower corners of the grille shutter by firmly pulling out on the ducting.
22. Remove the grille shutter and lay on a flat, stable surface.

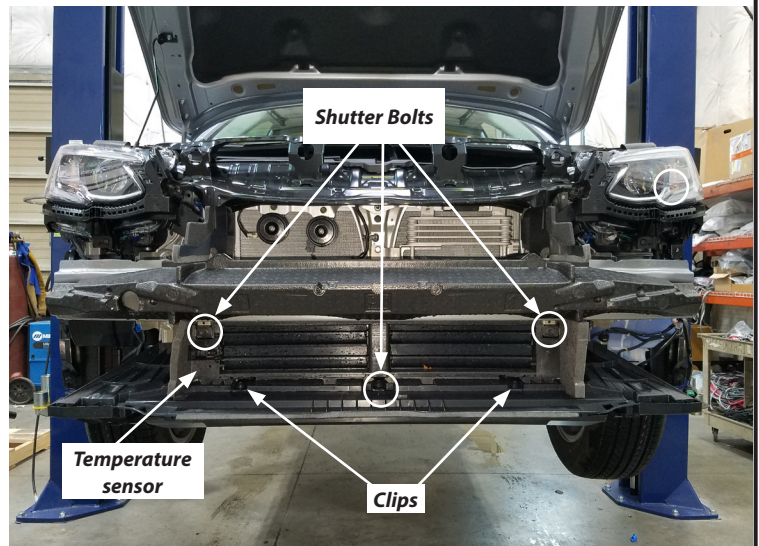


Figure 12

23. Using a 12mm socket and extension, remove the 8 bolts securing the bumper beam to the vehicle.
24. Lift up on beam and remove completely. *Save hardware for later use.*

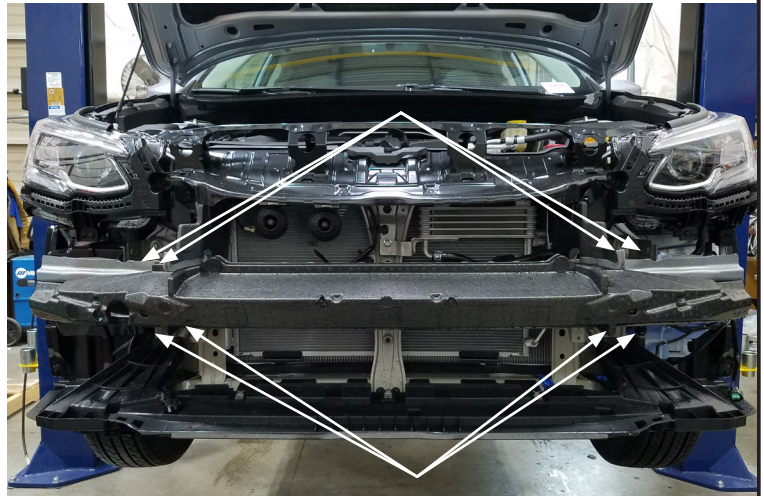


Figure 13

25. With the grille shutter on a flat and stable surface:
 - a. Remove the flap by drilling or breaking the two plastic rivets.
 - b. Remove the shutter motor from the assembly by removing the two screws with a T-20 Torx driver.

NOTE: Do not let shaft rotate after removal.

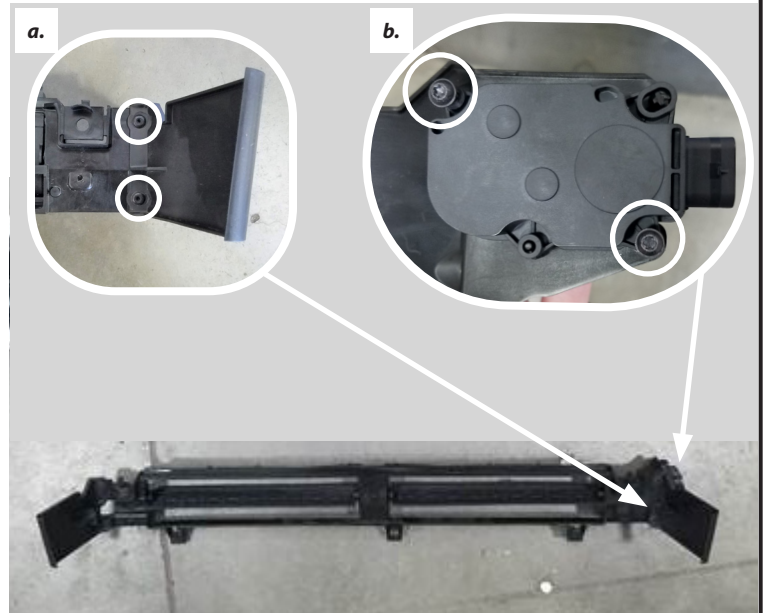


Figure 14

INSTALLATION INSTRUCTIONS

26. While keeping the shutter shaft in place (*do not let it rotate from original position*) apply an amount of glue rated for automotive plastic adhesion or an epoxy (e.g. *Gorilla Glue 2 Part Clear Epoxy*) to the end of the shutter shaft. **NOTE: Do not let the shaft rotate from original position.**
27. Reinstall motor in original orientation. **NOTE: The motor must be reinstalled in the same position as it was removed.**

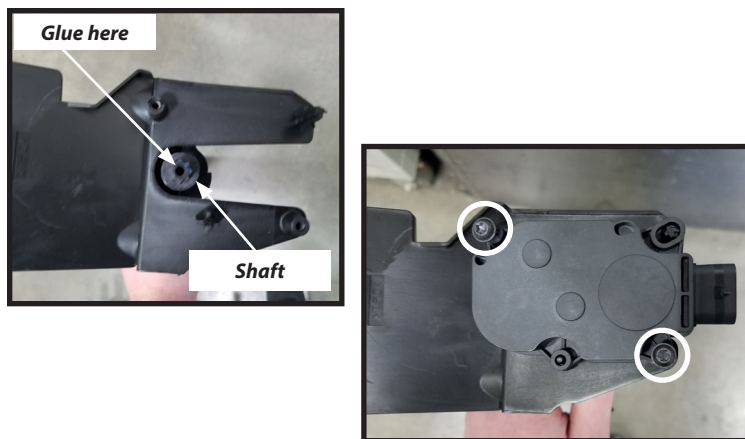


Figure 15

28. From the back side of the grille shutter, carefully cut the motor housing, motor stop and shaft from the shutter as shown. **IMPORTANT: Be sure the piece you cut, retains the motor stop.**

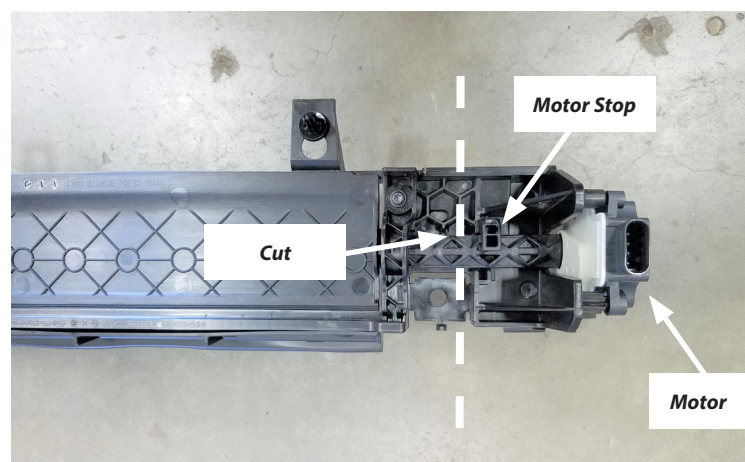


Figure 16

CAUTION Always use assistance when moving or lifting heavy parts.

29. With assistance, lift the mount and winch assembly into place. Secure using the 8 bumper beam mounting bolts removed in step 16 and the 8 washers (B1) from this kit.
30. Center the mount and tighten to torque specifications on page 3.

WARNING Never route electrical cables across sharp edges, over battery terminals, through or near moving parts, near parts that get hot.

31. Route the power cables along the top of the winch mount and then behind the headlight as shown. **NOTE: The cables will come out next to the washer fluid reservoir.**

WARNING Always connect red (+) power cable ONLY to the positive (+) terminal of the battery.

WARNING Always connect black ground (-) power cable ONLY to the negative (-) terminal of the battery.

32. Connect cables to the battery terminals.

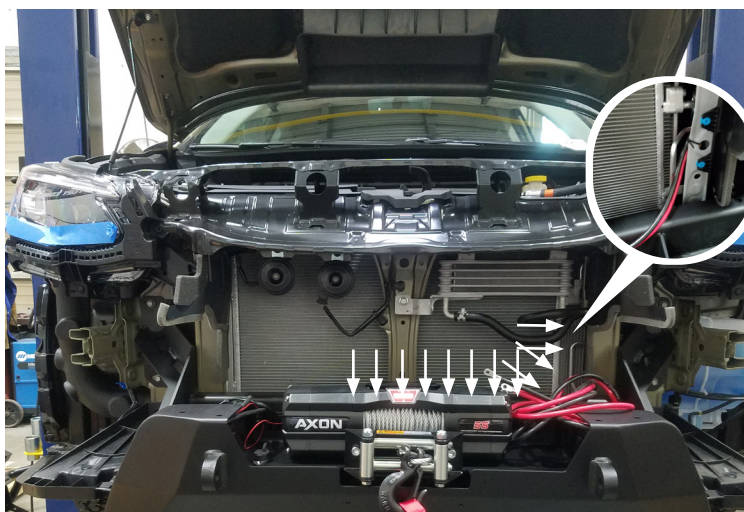


Figure 17

INSTALLATION INSTRUCTIONS

33. Reinstall temperature sensor into the slot provided on the top passenger side.



Figure 18

34. With the bumper cover on a padded, stable surface and the inside facing out, use tape to outline the area to be removed (as shown).



Figure 19

35. Carefully use a pneumatic reciprocating saw or similar to cut the plastic where marked. **NOTE: It can be helpful to cut a smaller portion out for the first cut and fine tune the cut after test fitting. The edges can be smoothed with a file or sanding disc.**



Figure 20

36. With the mounting kit installed, plug in the shutter motor and shaft assembly and secure to vehicle with zip ties, make sure the shaft is free to rotate.

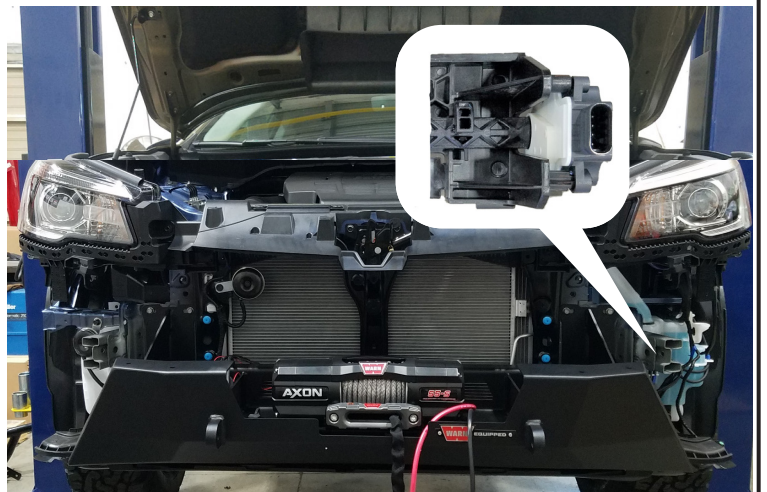


Figure 21

INSTALLATION INSTRUCTIONS

37. Reinstall the bumper cover over the mounting kit (reverse removal steps). **NOTE: Be sure to check for any areas of contact between the bumper cover and winch mount and trim as needed.**
38. Reinstall the wheel well push clips and all of the fasteners along the top edge of the grille.
39. Reinstall the plastic clips along the bottom of the bumper where possible, the center clip locations were removed with the center of the bumper cover.
40. Install plastic plugs (B4) if not installing the optional Bolt on Grille Guard Kit.
41. Plug in factory fog lights if equipped.
42. **OPTIONAL:** Mount license plate using hardware (B2) and (B3).



Figure 22

Installation is complete.

MAINTENANCE / CARE

1. Inspect all parts on the winch, winch mount, and related hardware prior to each use. Replace all hardware that appears rusted or deformed.
2. Inspect all nuts and bolts on the winch, winch mount, and related hardware prior to each use. Tighten all nuts that appear to be loose. Stripped, fractured, or bent bolts or nuts need to be replaced.
3. Check all cables prior to use. Replace cables that look worn or frayed.
4. Check all moving or rotating parts. Remove debris that may inhibit the part from moving freely.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

